ABSTRACT

[Summary]

[Object] A dielectric ceramic composition for high frequencies of Patent Document 1 has a firing temperature of as high as 1350°C to 1400°C and is unsuitable for use as a material for multilayer capacitors because of its excessively high firing temperature. A multilayer capacitor of Patent Document 2 requires a complicated time-consuming manufacturing process and may cause a structural defect due to a difference between the coefficients of thermal shrinkage of an adhesive layer and a ceramic layer, thereby causing difficulty in miniaturization and multilayering of a multilayer ceramic capacitor.

[Solving means] A dielectric ceramic composition of the present invention is represented by the general formula, $\text{Mg}_x \text{SiO}_{2+x} + \text{aSr}_y \text{TiO}_{2+y}, \text{ wherein } x, \text{ y and } \textbf{a} \text{ satisfy the }$ relations of 1.70 $\leq x \leq$ 1.99, 0.98 $\leq y \leq$ 1.02, and 0.05 $\leq \textbf{a} \leq$ 0.40, respectively.

[Selected figure] Fig. 1